MATERIAL DATA SHEET

Global O-Ring and Seal, LLC

COMPOUND	V70-B501	MATERIAL	FKM
DUROMETER	70 Shore A	COLOR	White
DESIGNATION	USP	REPORT DATE	2020-12-07
TEMP RANGE	-20°C (-4°F) to 250°C (482°F)	CURE SYSTEM	Peroxide
SPECIFICATION	ASTM D2000 M2HK710 A1-10 B37 B38 EF31 EO78 Z1 Z2		

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness (Shore A)	D2240-15$^{\varepsilon 1}$	–	Shore A	**71**	70 ±5
Tensile Strength	D412-16	–	MPa (PSI)	**15.6 (2,267)**	10 (1,450) min
Elongation at Break	D412-16	–	%	**383**	175 min
100% Modulus	D412-16	–	MPa (PSI)	**3.66 (531)**	–
Density	CNS 5341-96, Method A	–	Mg/m^3	**2.44**	–

A1-10 – HEAT RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D573-04	70 Hrs @ 250°C (482°F)	points	**4**	10 max
Tensile Strength Change	D573-04	70 Hrs @ 250°C (482°F)	%	**-5**	-25 max
Elongation Change	D573-04	70 Hrs @ 250°C (482°F)	%	**28**	-25 max
Weight Change	D573-04	70 Hrs @ 250°C (482°F)	%	**-1.5**	–

B37 – COMPRESSION SET

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Compression Set	D395-18, Method B	22 Hrs @ 175°C (347°F) (plied)	%	**25.2**	50 max

B38 – COMPRESSION SET

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Compression Set	D395-18, Method B	22 Hrs @ 200°C (392°F) (plied)	%	**29.3**	50 max

EF31 – FLUID RESISTANCE, ASTM FUEL C RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70Hrs @ 23°C (73°F)	points	**-2**	±5
Tensile Strength Change	D471-16a	70Hrs @ 23°C (73°F)	%	**-18**	-25 max

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Elongation Change	D471-16a	70Hrs @ 23°C (73°F)	%	**-2**	-20 max
Volume Change	D471-16a	70Hrs @ 23°C (73°F)	%	**2.8**	0 to 10

E078 – FLUID RESISTANCE, ASTM NO. 101 OIL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70Hrs @ 200°C (392°F)	points	**-5**	-15 to 5
Tensile Strength Change	D471-16a	70Hrs @ 200°C (392°F)	%	**2**	-40 max
Elongation Change	D471-16a	70Hrs @ 200°C (392°F)	%	**-4**	-20 max
Volume Change	D471-16a	70Hrs @ 200°C (392°F)	%	**3.5**	0 to 15

ADDITIONAL APPROVALS

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Data shown is based on supplier testing of compound slabs/buttons and is provided for general reference only.